A Visit to Kinabalu Park

by Perry Malouf (5308 Carlton St., Bethesda, MD 20816-2304

Introduction

Kinabalu Park is a national park in the state of Sabah, East Malaysia, located on the island of Borneo. It has a reputation for being a nature lover's wonderland, sporting interesting varieties of flora and fauna, many of which are endemic to the region. Most notable from the carnivorous plant enthusiast's point of view are the many species of Nepenthes found on Mount Kinabalu, the area's namesake and the tallest peak in southeastern Asia. Some of the rarest and most famous Nepenthes are found only on the slopes of this mountain. Shigeo Kurata's book entitled "Nepenthes of Mount Kinabalu" provides an extensive description of the Nepenthes found in and around the Park. I wanted to see some of these for myself and so I decided to spend one week there.

The Park is a popular retreat on weekends and holidays, the major attraction being the hike up the summit trail of Mount Kinabalu. No mountaineering equipment is needed since the trail is well-maintained (albeit physically demanding). Typically the hikers proceed to an overnight hut at 3353 m where they spend the night. (The restaurant at this hut is supplied by porters who carry food, propane, and paper goods up the summit trail every day). At 3 a.m. the next day the hikers set off for the summit where they watch the spectacular sunrise. Everyone who reaches the summit is awarded a certificate. I elected to spend the time looking for Nepenthes instead of hiking to the summit.

For the benefit of other enthusiasts who might want to plan their own visit, I include here a few helpful details. The Park facilities include various lodging accommodations which must be reserved in advance. Inquiries for booking and other correspondence may be addressed to:

The Director, Sabah Parks First floor, Lot 1-3, Block K P. O. Box No. 10626 88806 Kota Kinabalu Sabah, Malaysia voice phone 60-88-211881 fax 60-88-221001

where 60 is the country code for Malaysia, and 88 is the region code for the city of Kota Kinabalu and surrounding areas. Kota Kinabalu is the capital city of the state of Sabah, and it is on the north coast of Borneo. Kinabalu Park is a two hour drive into the mountains from Kota Kinabalu. Several airlines service the airport at Kota Kinabalu, and I and a Thai friend flew Malaysian airlines from Bangkok, Thailand (where I was vacationing) via Malaysia's capital Kuala Lumpur, to Kota Kinabalu. The second leg of the flight took about two and a half hours. We arrived on Sunday afternoon, November 27. A taxi from the airport to the Hyatt hotel in Kota Kinabalu cost MR30 (MR = Malaysian Ringgit, and US\$1 = 2.5 MR).

My plan was to overnight at the Hyatt hotel, and then head for the Park on Monday morning. Around the Hyatt hotel are shopping malls, and sidewalk restaurants where we ate with no ill effects (everything we ordered was well cooked and still hot when brought to us). We drank bottled water always, even in the hotel. The hotel staff spoke English fairly well, and the people in the sidewalk restaurants spoke enough broken English for us to get by easily. There was also a pharmacy nearby where I bought some decongestant. As nearly as I can tell, you do not need a prescription for most medications that require one in the U. S. I had brought antimalaria medication with me from the U. S. On Monday morning our departure was delayed because I had to wait for the banks to open at 9 a.m. in order to exchange currency. Although the hotel also exchanges currency, they have a daily limit which I easily wanted to exceed. Since our departure was delayed we could not take advantage of tour bus transportation to the Park which would have cost MR40. Instead I hired a taxi which cost me MR100, considerably more than the tour bus but still not unreasonable for a two-hour one-way ride which, by the way, is very scenic.

Arrival: The first half-day in the Park

My Thai friend and I arrived at the Park just after 1 p.m. on Monday afternoon, registered at the front office cabin, and then headed to our quarters in the Old Administration building. Near the Park entrance (at 1500 m) is a souvenir shop, the New Administration building, and a network of roads which wind through staff quarters, a recreation facility, and on up the mountain past lodgings and the Old Administration building. From there the road continues up one more kilometer to the entrance gate of the summit trail, which is near a power station that supplies electricity to some radio transmitters farther up the mountain. Around the Old Administration building are extensive trails through the forest, and also a mountain garden which is maintained by the staff. The Old Administration building itself houses a restaurant (which sustained us during our stay), exhibit hall, slide show theater, and some lodging. Our room was in the basement of the Old Administration building. It was fully furnished and included a private bath. My only complaint was that it was



Fig. 1 -- A misty segment of trail to Kinabalu summit described as "gentle". Photo by Perry Malouf.

very humid to the point where the bed blankets were damp to the touch, and there was an ever-present smell of mildew. Still, it was reasonably comfortable for MR80/night. Our excursion in the Park would consist of day-hikes only, since the more distant areas which required camping equipment were beyond our capabilities at the time. Besides essential toiletries, medication and clothing, we brought insect repellent, panchos, a portable water filter, cameras, and a knapsack.

After settling in, we walked back down the road to the New Administration building, where we met both the head botanist of the Park and our guide for the entire week. The four of us outlined the week's schedule, and then we were taken to the herbarium where there were many specimens of dried Nepenthes pitchers. I saw N. villosa, N. rajah, N. lowii, and most striking was a dried pitcher of N. edwardsiana—35 cm tall! I would have loved to have seen the plant from which this pitcher was taken, but was never presented with the opportunity. Our guide then took us

on a tour of the mountain garden.

This garden contains plants collected from all over the Park: orchids (most of which were not in bloom, unfortunately), rhododendrums, and—NEPENTHES! There were three N. rajah plants measuring 50 cm high and almost a meter across, with pitchers the size of large grapefruits (not including the lid). These plants were not fully grown, and there were several smaller specimens in pots. The only N, edwardsiana we would see during our trip was near the N. rajah, and it had one mature pitcher 15 cm tall and also two developing pitchers which had not opened yet. Other Nepenthes included several N. tentaculata, two N. fusca, one N. lowii, and another species I could not identify. Only the N. tentaculata and N. fusca grew wild in the garden (the other Nepenthes had been transplanted there), and in fact both of these could be found along the trails around the Old Administration building. I began taking photographs, and even with ASA400 film I needed a flash. This was due partially to the fact that I was taking close-up shots with my zoom lens. Typically, though, the entire area often becomes shrouded in clouds by mid-day, and the diffused sunlight filters through the dense forest canopy before reaching the Nepenthes on the forest floor. The lighting on the forest floor was not bright and a flash was essential since I did not have a tripod for long exposures.

After the mountain garden tour, our guide asked us to meet him the next morning in front of the Old Administration building at 7:30, and then left for the day.

Tuesday: The trek up the summit trail

On Tuesday morning, Dec. 29, we had a decent breakfast and then met our guide as instructed. The skies were clear, and for the first time I could see the top of Mt. Kinabalu. Clouds had covered most of the mountain the day before, and I did not even know it was there. But this morning I could see it in all its majesty, from the densely forested portion all the way to where green gave way to grey rock, and upward to the summit. Two hours later the clouds would move in again and take the mountain from view.

Our guide was very kind to employ his four-wheel-drive vehicle, which he referred to as his 'jalopy', to take us around. It was a Toyota, and it looked like a hybrid between a jeep and a pickup truck. His brother-in-law bought it, had two accidents in it (one where he tumbled it sideways off the road, down the mountain, and onto another road), and then sold it cheap to our guide who repaired it as best as he could. The doors did not fit the door seals all the way around, the rear window and rear view mirror were gone, but the thing ran. We used it all week long and it took us over some very rough logging roads, through streams, etc. It was not really 'street legal', so when we ventured out of the Park we avoided the larger villages where we might have gotten ticketed. Soon I noticed that none of the dashboard gauges worked, and I asked how the fuel level was determined. The diesel tank protrudes behind the driver's door, and our guide confidently smacked the tank with his hand and determined the fuel level by the reverberation of the tank.

We drove up the road to the summit trail entrance at 1829 m, which is called the Timpohon Gate. I was wearing long safari pants, hiking boots, a T-shirt, a windbreaker, and a small camera bag; my friend carried our backpack containing extra shirts, two panchos, water, lunch, and toilet paper. The summit trail is just that—an actual trail that leads up to the summit. Parts of it are a smooth and mild incline, and other parts resemble a muddy, steep, zigzag stairway that continues upward as far as

you can see. The hike is a very good athletic exercise, especially at these higher elevations. Even a person in good shape will breathe hard, and after one hour my shirt was soaked with perspiration even though the temperature never exceeded $24\,^{\circ}$ C. Our goal was to make it to the N, villosa areas at around $2700\,$ m, which is about $4.5\,$ km beyond the Timpohon Gate, and then do an extensive Nepenthes search on our descent back down the trail.

By 9:30 a. m. we had advanced 1.5 km and had passed two "shelters", or what I would call open cabanas with primitive bathrooms off to one side. We began to see N. tentaculata on the side of the path, climbing through the other vegetation. I took pictures of several different plants, some with green pitchers and others with reddish-brown pitchers. As in the mountain garden, there is no direct sunlight in the area where these plants are growing. Prior to my visit, I had misconceptions about how Nepenthes grow in the wild. This was due to a photograph I had seen in a back issue of CPN (vol. 22, nos. 1 & 2, March & June 1993), which showed a hillside carpeted with N. pervillei. On Mt. Kinabalu the Nepenthes do not grow that way at all. Rather, you will find a plant here, another over there about 40 m away, etc. They tend to not grow in a dense colony. If you are not keeping your eyes peeled for Nepenthes, it is very easy to walk right past them without noticing.

We continued up the trail, and were overtaken by a few hikers on their way to the summit (they were not stopping to photograph Nepenthes). Not long afterwards I saw two women porters, whom I guessed to be in their 40's, coming up the trail with baskets of food on their backs. Soon to follow was a young man with a 30 kg propane tank on his back, also making very good progress. I truly admired their physical conditioning. These people were not wearing hiking boots but only light sneakers, and I was amazed at this since I considered my boots to be absolutely essential.

By 10:30 we had advanced 2.5 km up the trail, and our guide took us on a detour into the brush in search of a N. lowii he had located previously. We found it about 25 m off the trail. It was a long vine, rising up from the ground about 2 m, clambering horizontally along a fallen tree for another 2 m, and then reaching upward toward more light. It had three large and classic pitchers on it, and a male inflorescence. Nearby there were also a few small N. tentaculata plants climbing through the bushes. We made our way back to the trail and kept going upward, and soon encountered other hikers on the way down from the over-night hut at 3353 m (the one with the restaurant supplied by the porters). They were mostly young college students, and they had wanted to reach the summit the day before but could not because it had rained. They never made it beyond the hut, and today they were coming back down to go home.

After another two and a half hours we had advanced two more kilometers up that trail, reaching the 2850 m level. This part of the trail is just below a shelter appropriately named Villosa Shelter. We reached this point at around 1 p.m. and my upper body was soaked with perspiration despite the mild temperatures. My glasses kept fogging up because the sweat would evaporate off my hot face and condense onto my glasses. We were walking through mist by now, since the clouds had come in upon us. I made the mistake of NOT changing into a dry shirt, and I believe this contributed to my catching a cold.

Once again our guide ventured off the trail down a very steep grade, and found a few gorgeous specimens of N. villosa. He beckoned us to follow, and I had to test every step. My guide is considerably smaller and lighter than I am. Just because that rotten log supports his weight does not mean it will support mine! I was holding onto saplings,

roots, anything I could get my hands onto as I descended down that steep grade. I stumbled and slid down the slope a few times. My clothes would have made a great test for a detergent in a TV commercial. Finally, I made it to the plants. There were three of them in reasonable proximity, each was fairly stocky and bush-like and approximately 1 m wide by 1 m tall. The pitchers were beautiful and had the classic shape depicted in popular photographs. They varied in size—some were as tall as 18 cm not counting the lid.

We struggled back up to the trail, and began our descent and search for other Nepenthes. After a short distance our guide led us off the trail again to a few plants of N. kinabaluensis. These were at least as large as the N. villosa we had just seen,

Fig. 2 -- Nepenthes rajah in Kinabalu Mountain Garden. Photo by Perry Malouf.

but the pitchers were larger and showed some characteristics of the component *N. rajah*.

Back on the descending trail again, I found that my quadriceps muscles began aching just above my knees. Hiking down requires more care than hiking up, in my opinion, and my muscles were feeling the strain. As we neared the elevation of one of the telecommunications towers, our guide once



Fig. 3 -- N. reinwardtiana pitcher. Note two "eye dots". Photo by Perry Malouf.



Fig. 4-- N. tentaculata (red) pitchers along summit trail. Note nearly white interior. Photo by Perry Malouf.

again led us off the trail. He told us to rest in a clearing while he explored around for more Nepenthes. Soon he called us to join him, and we found him in a group of saplings with three very large *N. lowii* vines winding through the branches. These were conservatory specimens if I ever saw any. Each vine was at least 5 m long, and there were pitchers in all stages of development hanging down from the leaf tendrils. Also not far away, in another tall bush, was a *N. tentaculata* with its tendrils coiled around the twigs and forming a cluster of pitchers.

By now the time was nearing 3 p.m., and we had another 2 km of descent to cover before reaching the gate. I was very tired, and the rest of that hike was very gruelling for me. Finally we arrived at the gate, boarded the jalopy, and headed back to the old Administration Building where my basement room beckoned to me. We arrived there at around 5 p.m. as dusk swallowed the mountain. My friend and I consumed a hearty dinner, and I popped an ibuprofen tablet in anticipation of muscle soreness. We were to meet our guide at 8:30 the next morning.

(continued next issue)

Focussing on International CP Conservation and Research: The Carnivorous Plant Specialist Group

by

Madeleine Groves and Rosemary Simpson

What is the Carnivorous Plant Specialist Group (CPSG) you may well ask and is there a need for yet another carnivorous plant organization?

To answer this question we have to look to the World Conservation Union (IUCN) which is based in Switzerland. Founded in 1948, this is an umbrella organization for the world's conservation agencies, encompassing both governmental and non-governmental organisations. Within IUCN there are a number of Commissions, one of which is the Species Survival Commission (SSC) which is dedicated to conserving species and biological diversity through, amongst other methods, the establishment of "Specialist Groups". The members of these groups help co-ordinate the efforts of numerous agencies and organisations around the world who are dedicated to the conservation and research of a particular plants (e.g. carnivorous plants, cacti, palms, orchids) or animals (e.g. crocodiles, microbats, elephants, otters).

The Carnivorous Plant Specialist Group was established in 1987 by Professor G. Ll. Lucas, (Royal Botanic Gardens, Kew) and was comprised of six members with Dr Martin Cheek (RBG, Kew) acting as Chair until 1994 when he handed over to Bertrand von Arx (Conservation Officer at the Geneva Botanic Garden and Swiss CITES Management Authority). Today the CPSG has 32 members and an extensive list of contacts. Unfortunately it is necessary to restrict the membership to this small number to ensure swift communication but individuals have been chosen to ensure maximum coverage amongst the carnivorous plant community. For example Rick Walker, President of the ICPS is a member of CPSG and through him updates on CPSG's activities can distributed through CPN and the CP Newsgroup on the Internet.

This brings us to the second question - do we really need another carnivorous plant organisation now? Well, there is an obvious need to improve and co-ordinate